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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,281	07/30/2001	Naofumi Kobayashi	FUJI 18.872	2411
26304	7590	01/11/2005	EXAMINER	
KATTEN MUCHIN ZAVIS ROSENMAN 575 MADISON AVENUE NEW YORK, NY 10022-2585			HAN, CLEMENCE S	
			ART UNIT	PAPER NUMBER
			2665	
DATE MAILED: 01/11/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/918,281

Applicant(s)

KOBAYASHI, NAOFUMI

Examiner

Clemence Han

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2001.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-18 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/30/01.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. Claim 9, 10, 13 and 15-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
2. The claim 9 and 10 are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. Especially, in the last 3 lines of the claims, it is indefinite and not clear whether the device in an alternative route is in congested state or not.
3. Claim 13 recites the limitation "the other communication networks" in the last line. There is insufficient antecedent basis for this limitation in the claim.
4. Claim 15, 16 and 18 recites the limitation "the IP network" in the last line. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this

subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claim 1-10, 13, 14 and 16-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Masuda et al. (US 6,201,810).

Regarding to claim 1, Masuda teaches a communication device connectable to an IP network, comprising: a congestion monitor unit 14 monitoring whether the communication device is congested (Column 5 Line 52-54); and a congestion information creating unit 16 creating congestion information (Figure 6) concerning a congested state of the communication device when the congestion monitor unit detects the congested state thereof, the congestion information being sent to other devices connected the IP network (Column 5 Line 66 – Column 6 Line 2).

Regarding to claim 2, Masuda teaches a routing table 13 storing information used for routing an input packet; and an updating unit updating the routing table upon receiving congestion information from another device (Column 7 Line 60-65).

Regarding to claim 3, Masuda teaches said congestion monitor unit detects a situation in which an input queue of the communication device overflows with packets so that packets are discarded (Column 8 Line 30-32).

Regarding to claim 4, Masuda teaches said congestion monitor unit detects a situation in which packets are stored an input queue of the communication device over a predetermined queue length (Column 5 Line 52-54).

Regarding to claim 5, Masuda teaches the congestion information created by said congestion information creating unit is sent to other communication devices adjacent to the communication device (Column 5 Line 66 – Column 6 Line 2).

Regarding to claim 6, Masuda teaches the congestion information created by said congestion information creating unit is sent to other communication devices located within given network range (Column 5 Line 66 – Column 6 Line 2).

Regarding to claim 7, Masuda teaches a unit for relaying congestion information received from another network to a route via which packets can be transported (Column 6 Line 23-27).

Regarding to claim 8, Masuda teaches a unit for determining whether a route that can avoid congestion for an input packet is available (Column 7 Line 4-9).

Regarding to claim 9, Masuda teaches a unit sending an input packet to an original route if congestion information is received from another communication device and there is a congested communication device in an alternative route that can avoid congestion related to said congestion information received (Column 5 Line 35-51).

Regarding to claim 10, Masuda teaches a unit discarding an input packet if congestion information is received from another communication device and there is a congested communication device in an alternative route that can avoid congestion related to said congestion information received (Column 5 Line 35-51).

Regarding to claim 13, Masuda teaches a unit sending information indicative of restoration from the congested state to the other communication networks (Column 8 Line 12).

Regarding to claim 14, Masuda teaches congestion monitor unit monitors one of an input interface and an output interface of said communication device (Column 5 Line 52-54).

Regarding to claim 16, Masuda teaches a communication control method comprising the steps of: monitoring whether the communication device is congested (Column 5 Line 52-54); and creating congestion information (Figure 6) concerning congested state of the communication device when the congested state thereof is detected, congestion information being sent other devices connected the IP network (Column 5 Line 66 – Column 6 Line 2).

Regarding to claim 17, Masuda teaches updating a routing table storing information used for routing an input packet upon receiving congestion information from another device (Column 7 Line 60-65).

Regarding to claim 18, Masuda teaches a system comprising: plurality of communication devices (Figure 1, nodes in Figure 10), each of the plurality of communication devices comprising: a congestion monitor unit 14 monitoring whether the communication device is congested (Column 5 Line 52-54); and congestion information creating unit 16 creating congestion information (Figure 6) concerning a congested state of the communication device when the congestion monitor unit detects the congested state thereof, the congestion information being sent to other devices connected to the IP network (Column 5 Line 66 – Column 6 Line 2).

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 11, 12 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masuda et al. in view of Greuel et al. (US Pub 2002/0133584).

Regarding to claim 11, Masuda teaches a communication device connectable to an IP network, comprising: a congestion monitor unit 14 monitoring whether the communication device is congested (Column 5 Line 52-54); and a congestion information creating unit 16 creating congestion information (Figure 6) concerning

a congested state of the communication device when the congestion monitor unit detects the congested state thereof, the congestion information being sent to other devices connected the IP network (Column 5 Line 66 – Column 6 Line 2).

Masuda, however, does not teaches said congestion monitor unit monitors a frequency of occurrence of congested state. Greuel teaches said congestion monitor unit monitors a frequency of occurrence of congested state (packet discard rate in [0020]). It would have been obvious to one skilled in the art to modify Masuda to monitor a frequency of occurrence of congested state as taught by Greuel in order to monitor the performance of a network [0006].

Regarding to claim 12, Masuda teaches a communication device connectable to an IP network, comprising: a congestion monitor unit 14 monitoring whether the communication device is congested (Column 5 Line 52-54); and a congestion information creating unit 16 creating congestion information (Figure 6) concerning a congested state of the communication device when the congestion monitor unit detects the congested state thereof, the congestion information being sent to other devices connected the IP network (Column 5 Line 66 – Column 6 Line 2). Masuda also teaches selecting optimal route (Column 7 Line 4-9). Masuda, however, does not teaches a unit notifying other communication devices a frequency of occurrence of congested state monitored by said congestion monitor unit. Greuel



teaches a unit notifying other communication devices a frequency of occurrence of congested state (packet discard rate in [0020]) monitored by said congestion monitor unit. It would have been obvious to one skilled in the art to modify Masuda to monitor a frequency of occurrence of congested state as taught by Greuel in order to monitor the performance of a network [0006].

Regarding to claim 15, Masuda teaches a communication control method comprising the steps of: monitoring whether the communication device is congested (Column 5 Line 52-54); creating congestion information (Figure 6) concerning congested state of the communication device when the congested state thereof is detected, the congestion information being sent to other devices connected the IP network (Column 5 Line 66 – Column 6 Line 2). Masuda, however, does not teach defining an accounting system based on a packet discard ratio determined based on a congestion avoiding control. Greuel teaches defining an accounting system based on a packet discard ratio determined based on a congestion avoiding control [0020]. It would have been obvious to one skilled in the art to modify Masuda to monitor a frequency of occurrence of congested state as taught by Greuel in order to monitor the performance of a network [0006].

*Conclusion*

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of the art with respect to the invention in general.

U.S. Patent 6,681,232 to Sistanizadeh et al.

U.S. Patent 6,741,572 to Graves et al.

U.S. Patent 6,259,696 to Yazaki et al.

U.S. Patent 6,581,166 to Hirst et al.

U.S. Pub. 2001/0007560 to Masuda et al.

U.S. Pub. 2004/0085962 to Sugai et al.

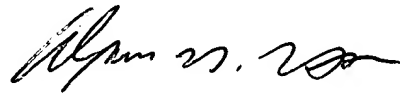
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clemence Han whose telephone number is (571) 272-3158. The examiner can normally be reached on Monday-Thursday 7 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C.H.

Clemence Han  
Examiner  
Art Unit 2665



ALPUS H. FSI  
PRIMARY EXAMINER